

CLAIMS

1. An asynchronous machine for a starter-generator of an internal combustion engine, comprising a stator and a rotor, wherein the rotor includes a rotor shaft, a stack of sheets, and a squirrel cage non-rotatably connected with the rotor shaft and the stack of sheets, wherein the squirrel cage has a short circuit ring on each opposite front end, wherein each said short circuit ring is secured with an annular reinforcement element, wherein the reinforcement elements do not overlap adjacent, outer circumferential surfaces of the squirrel cage or the short circuit rings.

2. The asynchronous machine according to claim 1, wherein the outer circumferential surfaces of the reinforcement elements and adjacent outer circumferential surfaces of the squirrel cage or the short circuit ring are flush with one another.

3. The asynchronous machine according to claim 1, wherein the short circuit rings are made from copper and are connected by solders with short circuit bars made of copper to the squirrel cage.

4. The asynchronous machine according to claim 1, wherein at least one of the reinforcement elements are pressed on in an axial direction against an adjacent short circuit ring.

5. The asynchronous machine according to claim 1, wherein the stack of sheets is supported with the squirrel cage between the reinforcement elements.
6. The asynchronous machine according to claim 1, wherein at least one of the reinforcement elements is screwed, welded, or riveted with the stack of sheets of the rotor.
7. The asynchronous machine according to claim 1, wherein one of the reinforcement elements is mounted with play on the rotor shaft and is braced against an annular shoulder of the rotor shaft.
8. The asynchronous machine according to claim 1, wherein one of the reinforcement elements is shrunken onto the rotor shaft.
9. The asynchronous machine according to claim 1, wherein that one of the reinforcement elements is pressed onto the rotor shaft.
10. The asynchronous machine according to claim 1, wherein the reinforcement elements overlie radially inward an inner circumferential surface of the short circuit ring.

11. The asynchronous machine according to claim 1, wherein at least one of the reinforcement elements is a cylindrical disk with a through-opening for the rotor shaft, wherein said cylindrical disk is limited by two flat front surfaces.
12. The asynchronous machine according to claim 1, wherein the reinforcement elements comprise magnetic steel.
13. The asynchronous machine according to claim 1, wherein at least one of the reinforcement elements is machined for balancing of the rotor by selective material reduction.
14. The asynchronous machine according to claim 13, wherein the at least one reinforcement element is machined on a front side facing away from an adjacent short circuit ring by material reduction.
15. The asynchronous machine according to claim 1, wherein the stack of sheets is supported with the short circuit rings between the reinforcement elements.